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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/630,499	07/30/2003	John L. Bennett	60,130-1845;03MRA0345	7902

26096 7590 07/26/2005

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EXAMINER

LEWIS, TISHA D

ART UNIT	PAPER NUMBER
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3681

DATE MAILED: 07/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/630,499

Applicant(s)

BENNETT, JOHN L.

Examiner

TISHA D. LEWIS

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4,8,9,11-14 and 16-29 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 13,14,16,17 and 23-26 is/are allowed.
- 6) ☒ Claim(s) 1,4,8,9,11,12,18,21,22 and 27-29 is/are rejected.
- 7) ☒ Claim(s) 2,19 and 20 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 May 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: ____.

DETAILED ACTION

The following is a response to the amendment received on May 18, 2005 which has been entered.

Response to Amendment

Claims 1, 2, 4, 8, 9, 11-14 and 16-29 are pending in the application. Claims 3, 5-7, 10 and 15 have been cancelled. Claims 18-29 are newly added.

- The replacement sheet drawings have been approved.
- The amendment to the specification has been entered.
- The objection to claim 12 has been withdrawn due to applicant amending to correct a typographical error.

-The 102(e) rejection of claims 1, 2 and 10-13 has been withdrawn due to applicant amending claims 1 and 13 over the prior art of record (Angeles '260).

-The 103(a) rejection of claims 13-17 has been withdrawn due to applicant amending claim 13 over the prior art of record (Reffle '825 in view of Angeles).

Response to Arguments

Applicant's arguments filed May 18, 2005 have been fully considered but they are not persuasive. Applicant's arguments as to the 102(b) rejection under the Reffle reference is acknowledged, however; the limitations of claim 1 does not suggest that the gears (i.e., drive, driven, pinion, or ring) are directly meshing with each other or that the at least one electric motor is driving both axles at the same time.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 4, 8, 18, 21, 22 and 27-29 are rejected under 35 U.S.C. 102(b) as being unpatentable by Reffle ('825). As to claim 1, Reffle discloses a first axle (via 20a) on a first axis, a second axle (via 20b) on a first axis, a motor (25) on a second axis transverse to the first axis and driving both first and second axles, a first gear stage driven by the motor having a drive gear (26) driven about the second axis driving a driven gear (31), a second gear stage (via 32) driven by the first stage including a pinion (33) driven by the drive gear and a ring gear (34) driven on the first axis by the pinion wherein the axle shafts extend through the ring gear and a differential (35) driven by the second stage to drive the first and second axles.

As to claim 4, Reffle discloses the driven gear (31) coaxial with the pinion gear (33).

As to claim 8, Reffle discloses the first and second axis of rotation being perpendicular.

As to claim 18, Reffle discloses the driven gear (31) being a single gear driving the pinion gear on an axis parallel to the second axis.

As to claim 21, Reffle discloses the first axle (via 20a), second axle (via 20b) and ring gear (34) being coaxial and the driven gear (31) directly driving the pinion gear (33) which directly drives the ring gear which directly drives the differential.

As to claim 22, Reffle discloses the first and second axles being housed (not referenced) to drive a wheel assembly.

As to claims 27-28, Reffle discloses a frame having a pair of longitudinal members (via 57) transverse to the first axle and parallel to the body of the motor (remaining limitations same as rejection for claim 1).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 9, 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reffle in view of Adam et al ('748). Reffle discloses a ring gear coupled to a differential, but does not disclose a two speed module driven by the ring gear.

Adam et al discloses a two speed differential having an input coupled to a ring gear and a differential contained within the two speed differential.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide Reffle with a two speed differential in view of Adam et al to provide speed ratios at the wheel assembly without the use of a gearbox or transmission.

Allowable Subject Matter

Claims 13, 14, 16, 17 and 23-26 are allowed.

The following is an examiner's statement of reasons for allowance: The prior art of record does not disclose or render obvious a motivation to provide for:

-(as to claim 13) an axle assembly having a first electric motor having a second axis transverse to a first axis of a first and second axle shaft, a second electric motor having a third axis transverse to the first axis, a first gear stage driven by both motors including a first drive gear driven by the first motor and a second drive gear driven by the second motor wherein the first and second drive gear drive a driven gear in combination with all the remaining limitations of claim 13.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Claims 2, 19 and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

FACSIMILE TRANSMISSION

Submission of your response by facsimile transmission is encouraged. Group 3600's facsimile number is **(703) 872-9326 before final and 703-872-9327 after final**. Recognizing the fact that reducing cycle time in the processing and examination of patent applications will effectively increase a patent's term, it is to your benefit to submit responses by facsimile transmission whenever permissible. Such submission will place the response directly in our examining group's hands and will eliminate Post Office processing and delivery time as well as the PTO's mail room processing and delivery time. For a complete list of correspondence not permitted by facsimile transmission,

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see MPEP 502.01. In general, most responses and/or amendments not requiring a fee, as well as those requiring a fee but charging such fee to a deposit account, can be submitted by facsimile transmission. Responses requiring a fee which applicant is paying by check **should not be** submitting by facsimile transmission separately from the check.

Responses submitted by facsimile transmission should include a Certificate of Transmission (MPEP 512). The following is an example of the format the certification might take:

I hereby certify that this correspondence is being facsimile transmitted to
the Patent and Trademark Office (Fax No. (703) 000-0000) on _____ (Date)

Typed or printed name of person signing this certificate:

(Signature)

If your response is submitted by facsimile transmission, you are hereby reminded that the original should be retained as evidence of authenticity (37 CFR 1.4 and MPEP 502.02). Please do not separately mail the original or another copy unless required by the Patent and Trademark Office. Submission of the original response or a follow-up copy of the response after your response has been transmitted by facsimile will only cause further unnecessary delays in the processing of your application; duplicate responses where fees are charged to a deposit account may result in those fees being charged twice.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the

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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TISHA D. LEWIS whose telephone number is 571-272-7093. The examiner can normally be reached on M-Thur 6 AM TO 2:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, CHARLES A. MARMOR can be reached on 571-272-7095. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tdl
July 21, 2005


TISHA LEWIS
PRIMARY EXAMINER
Hu 3681 7/21/05

Serial No. 10/630,499; Applicant: Bennett; Filing date: 7/30/2003
AXLE ASSEMBLY WITH TRANSVERSE MOUNTED ELECTRIC MOTORS

AXLE ASSEMBLY WITH TRANSVERSE MOUNTED ELECTRIC MOTORS

